

IN THE CLAIMS:

1. (currently amended) A cooling apparatus employed in ~~the~~ an optical fiber drawing process ~~of an optical fiber~~, comprising:

 a cooling body ~~having a left cooling body part and a right cooling body part~~ extending along a longitudinal direction of a drawn optical fiber, the cooling body comprising a left cooling body part and a right cooling body part, said cooling body being configured such that the left and right parts are separable to transition from a joined state to a separated state and further configured such that said left and right parts are joinable to transition from the separated state to the joined state, said apparatus being configured for, based on a current drawing speed of the drawn optical fiber, automatically operating said cooling body to transition said parts from said separated to said joined state ~~closed by a sealing cap through which cooling gas can be supplied into the cooling body and the left and right cooling parts closing based upon a drawing speed of the optical fiber; and,~~

at least one turbulence generator mounted within the cooling body to surround the drawn optical fiber, a turbulence generator disposed and configured for activating a molecular flow of the cooling gas supplied into the cooling body;

wherein the turbulence generator is activated based a drawing speed of the optical fiber.

2. (currently amended) The cooling apparatus in accordance with claim 1, wherein the cooling apparatus further comprises ~~two or more~~ another turbulence generator generators.

3. (currently amended) The cooling apparatus in accordance with claim 24,
wherein the cooling body has a longitudinal direction, the turbulence generators are being
mounted along the longitudinal direction of the cooling body ~~in a stacked structure~~.

4. (currently amended) The cooling apparatus in accordance with claim 1,
wherein the cooling body further comprises at least one vibration-damping jig located
between the turbulence generator and the drawn optical fiber to uniformly maintain ~~the~~
quality of cooling the optical fiber.

5. (currently amended) The cooling apparatus in accordance with claim 4,
wherein said at least one amounts to a plurality of vibration-damping ~~jig is~~ jigs, said jigs
being positioned along the drawn optical fiber.

6. (original) The cooling apparatus in accordance with claim 4, wherein the
cooling apparatus body comprises two or more vibration-damping jigs.

7. (currently amended) The cooling apparatus in accordance with claim 4,
wherein said at least one amounts to a plurality of the vibration-damping jigs, said jigs
being ~~are~~ symmetrically mounted in the cooling body.

8. (currently amended) The cooling apparatus in accordance with claim 1,
wherein the cooling body has an inside through which the drawn optical fiber passes, and
wherein the turbulence generator is provided with at least one slot for enabling the

turbulence generator to communicate with thesaid inside of the cooling body through which the drawn optical fiber passes.

9. (currently amended) The cooling apparatus in accordance with claim 1,

wherein the turbulence generator comprises a cooling fan is comprised of cooling fans.

10. (original) The cooling apparatus in accordance with claim 2, wherein the

turbulence generators are mounted in a symmetrical fashion.

11. (currently amended) The cooling apparatus in accordance with claim 1,

wherein the left and right cooling body parts are further configured to be supplied with cooling water.

12. (currently amended) The cooling apparatus in accordance with claim 1,

wherein the left and right cooling body parts are provided configured to be supplied with helium gas.

13. (currently amended) The cooling apparatus in accordance with claim 1,

wherein the turbulence generators generator comprises at least one cooling fan arranged for producing turbulence.

14. (new) The cooling apparatus in accordance with claim 1, further comprising a sealing cap for the cooling body, said sealing cap being configured with an aperture for supplying the cooling body with the cooling gas.

15. (new) The cooling apparatus in accordance with claim 1, further configured for, based on a current drawing speed of the drawn optical fiber, automatically operating the turbulence generator.

16. (new) A cooling apparatus employed in an optical fiber drawing process, comprising:

a cooling body extending along a longitudinal direction of a drawn optical fiber, the cooling body comprising a left cooling body part and a right cooling body part, said cooling body being configured such that the left and right parts are separable to transition from a joined state to a separated state and further configured such that the left and right parts are joinable to transition from the separated state to the joined state; and

means for controlling the cooling apparatus, said means being configured for, based on a current drawing speed of the drawn optical fiber, automatically operating said cooling body to transition said parts from said separated to said joined state.

17. (new) The cooling apparatus in accordance with claim 16, further comprising, mounted within the cooling body to surround the drawn optical fiber, a turbulence generator disposed and configured for activating a molecular flow of cooling gas supplied into the cooling body.

18. (new) The cooling apparatus in accordance with claim 17, wherein said means for controlling the cooling apparatus are further configured for, based on a current drawing speed of the drawn optical fiber, automatically starting up operation of the turbulence generator.

19. (new) The cooling apparatus in accordance with claim 16, further comprising a sealing cap for the cooling body, said sealing cap being configured with an aperture for supplying the cooling body with the cooling gas.

20. (new) The cooling apparatus in accordance with claim 16, wherein said means for controlling the cooling apparatus are further configured for automatically operating the cooling body to transition said parts from said joined to said separated state upon completion of said drawn optical fiber.